

Site Registry Report Broadway-Pantano Study Area Pima County, Tucson, Arizona

The Broadway-Pantano site is located within the Tucson basin, which is part of the Santa Cruz River Valley. The site lies between, but is not bounded by the Pantano Wash on the east, Wilmot Road on the west, Speedway Blvd. on the north and 22nd Street on the south. The Broadway North Landfill (BNLF) occupies approximately 130 acres of land in the northeast portion of the site area, north of Broadway Blvd. on the Pantano Wash. The landfill was originally developed as a sand and gravel mining operation in the mid 1940's. The City of Tucson (COT) and Pima County operated the landfill between 1959 and 1974 for the disposal of municipal waste.

Pathways of concern are soil and groundwater. In 1983, detections of volatile organic compounds (VOCs) were found in COT wells located downgradient of the landfill. Broadway-Pantano was established as a WQARF site by ADEQ in 1990. The COT, Pima County Solid Waste Division (PCSW) and Gateway Centre Limited Partnership (current property owners) began remedial investigations at the BNLF. In 1991, three COT water supply wells had been removed from service due to VOC contamination.

The most recent groundwater quality data collected by the COT in September 1997, indicates that VOCs continue to be present above the Aquifer Water Quality Standards(AWQS) in several of the area's wells. The highest concentrations of VOCs detected were tetrachloroethene (PCE) at 95.4 Fg/l and trichloroethene (TCE) at 24.1Fg/l.

TCE was detected in groundwater samples collected from the St. Joseph's Hospital well in September 1995. City water was provided to the hospital until a wellhead treatment system was installed by the COT in 1997.

The COT and PCSW are currently investigating the site with oversight by ADEQ. A Final Draft Remedial Investigation Report (RI) was submitted to ADEQ in March 1998.

Remedial investigation activities at the BNLF have been separated into two operable units, the Groundwater Operable Unit (GOU) and the Landfill Operable Unit (LOU). Activities included in the RI for the LOU are: a shallow soil gas survey to identify potential sources of groundwater contamination, installation of 13 shallow permanent soil gas probes to monitor the presence of landfill gases and evidence of leachate generation, the installation of three groundwater monitoring wells each with four nested soil gas probes located along the downgradient (western) landfill boundary and regular monitoring of the soil gas probes and groundwater monitor wells.

A risk assessment (RA) prepared by the COT contractors concluded that no short term risk or emergency situation exists at the BNLF due to the mitigation of landfill vapors into adjacent residences. Risks associated with the groundwater contaminant concentrations in excess of the MCLs are mitigated by the closure of all City water supply wells impacted by VOCs. The risk of exposure resulting from onsite excavation or construction does not appear to be potentially significant for future construction workers or current and future visitors to the site.

The site was given a score of 48, using the adopted eligibility and evaluation (E&E) form.

This Site Registry Report (SRR) is based upon information available as of the date shown. The SRR is intended as a historical document meeting the public notification requirements of ARS § 49-287.01 (B) and (D). Site boundaries depicted on the attached Site Boundary Maps represent ADEQ's interpretation of data available at the time the maps were constructed. The maps are intended to provide the public with basic information as to the estimated geographic extent of known contamination as of the date of the SRR. The actual extent of contamination may be different. Therefore, the geographic boundaries for this site may change in the future as new information becomes available.

An updated SRR and associated Site Boundary Map **will not** be issued. As new information becomes available, it will be made available for public review through placement in the public file.

Interested persons are encouraged to review current information, and more detailed historical information, located in the public site file at either the ADEQ Tucson Office or the ADEQ Phoenix Office (Site File #E-5460) and identified by the attached site file index.